

10/587505

3AP20 Rec'd PCT/PTO 27 JUL 2006

Translation of the pertinent portions of the Notification Regarding the Forwarding of the International Search Report and of the Written Notification from the International Searching Office, mailed 10/04/2005

This International Search Report comprises a total of 8 pages. Copies of the documents cited in this report are also enclosed.

3. Lack of Unity of the Invention (see Field III)

4. Regarding the title of the invention:

X the wording filed by Applicant is approved

5. Regarding the abstract:

X the wording was determined by the Office in accordance with Rule 38.2b) in the version shown in Field IV [and indicated on the cover sheet of the published PCT application]

6. Regarding the drawings:

a. the following version of the drawing figures is to be published with the abstract: Fig. 2

X as selected by the Office, because Applicant himself has not proposed a drawing figure.

Translation of the pertinent portions of the Written Notification
from the International Searching Office

1. This Notification contains information regarding the
following items:

- Field I Basis of the Notification
- Field III No Preparation of an Expert Opinion Regarding
Novelty, Inventive Activities or Commercial
Applicability
- Field IV Lack of Unity of the Invention
- Field V Reasoned Determination under Rule 43bis.1(a)(i)

Field I Basis of the Notification

[no items marked in this section]

Field III No Preparation of an Expert Opinion Regarding Novelty,
Inventive Activities or Commercial Applicability

The following portions of the invention were not examined
as to whether the claimed invention is to be considered to be
novel, based on inventive activities (non-obvious) and
commercially applicable:

Claims 5, 11 to 40

Reasons:

No International Search Report has been prepared for the
entire application of the above mentioned claims 5, 11 to 40.

Field IV Lack of Unity of the Invention

1. Upon the request for payment of additional fees,
Applicant has

not paid any additional fees. [?]

3. The Office is of the opinion that the requirement
regarding unity of the invention in accordance with Rule 13.1,
13.2 and 13.2

has not been met for the following reasons:

see the attached sheet

4. Therefore the notification has been prepared for the following portions of the international application:

the portion relating to claims 1 to 7, 41, 42

Field V Reasoned Determination under Rule 43bis.1(a)(i)

1. Determination

Novelty	Yes: Claims 1-10,30-40,41,42
	No: Claims

Inventive Activities	Yes: Claims
	No: Claims 1-10,30-40,41,42

Commercial Applicability	Yes: Claims 1-10,30-40,41,42
	No: Claims

2. References and Explanations

see the attached sheet

ATTACHED SHEET

Re.: Item III

Because of a problem regarding unity, an incomplete search has been performed. Since the concept of claims 1 to 5 basically differs from the concept of claims 5 [sic], 8 to 40 (see the reason under Item IV in this connection), depending claims 8 to 40 have not been searched.

Re.: Item IV

1 The single common idea (identical or connected characteristics) between independent claims 1, 3, 5 is **a priori** the compensation of the transverse/longitudinal elongation of the material to be imprinted by a design and/or a positioning of a print image location. However, this common inventive idea is not inventive (see below).

Therefore no single common inventive idea exists between independent claims 1, 3, 5.

2 In view of D1 - USP 5,806,430 the subject of claims 1, 3, 5 is not inventive (Article 33(1), 33(3) PCT) for the following reasons:

2.1 Document D1 - USP 5,806,430, which is considered to constitute the closest prior art, discloses (see the abstract) a printing press with a plurality of printing groups, wherein a portion of the transverse elongation of the material to be imprinted, which is known at the time of the application of an image to at least one printing forme to be arranged in the downstream-located printing group, is compensated by means of a design on the printing forme, from which the subject of **claim 5** differs in that an image regulator, which deforms the material to be imprinted transversely in respect to its production flow, compensates the transverse elongation of the material to be imprinted by a factor DQ.

2.2 Therefore the object to be attained by means of the present invention can be seen to lie in improving the compensation of the transverse/longitudinal elongation.

2.3 However, it is generally known to one skilled in the art (for example, see D2 - USP 4,404,906, column 1) that the following characteristics are suitable for compensating the transverse/longitudinal deformation:

- a design on the printing forme - see D1 or D2, col. 1, lines 27 to 37,

- a positioning of the print image location - see D3 - DE 195 16 368, or D4 - DE 197 47 728, col. 1, lines 28 to 32, or D5 - USP 5,076,163, or D6 - US2003/0047092, paragraph [0004], Figs. 1 to 5, or D7 - EP 1 182 035,

- an image regulator - see D2, col. 1, lines 39 to 46, or D8 - DE 43 27 646, abstract, or D9 - USP 6,550,384 abstract,

- an image regulator with an air nozzle - see D10 - USP 5,553,542, Fig. 4,

- a tensioning system for a material to be imprinted - see D2, column 1, lines 48 to 53,

- a roller which deforms the material to be imprinted - see D2, column 2, lines 1 to 10,

- a traction roller - see D11 - EP 1 048 460.

These characteristics are equivalent and can be interchanged if needed. In addition, it is clear that these characteristics are not connected with each other and that they can be used independently of each other.

Document D2 describes the same advantages (the compensation of the transverse elongation) as the instant application.

The characteristics "image regulator", "design" and/or "positioning of the print image location" represent only two/three of several obvious options, from which applicant has made a selection in accordance with the circumstances without inventive actions in order to attain the intended object.

Between the characteristics of claim 5 **there is neither synergy, nor any surprising effects**, for selecting such a combination. The subject of claim 5 merely consists of a side-by-side representation of known characteristics and therefore is not inventive (Article 33(1), (3) PCT).

2.4 The subject of independent method claims 1, 3 is also not inventive, because the methods do not show any surprising effects at all in connection with the use of characteristics such as "image regulator", "design" and/or "positioning of the print image location". Also, the characteristic "reference marker" is already known to one skilled in the art (see, for example, DE 197 47 728, or USP 5,076,163, or USP 5,813,333, Fig. 12) for measuring

the registration error/the elongation of the material to be imprinted.

2.5 The subject of claims 1, 3, 5 is not inventive (Article 33(1), (3) PCT).

3 The subject of claim 5 is not inventive, and the different inventions/groups of inventions therefore are a **posteriori**:

- 1 - Claims 1 to 10, 41, 42
the properties/characteristics of the image regulator,
- 2 - Claims 5, 11 to 22, 28, 29
the properties/characteristics of the printing groups and their cylinders,
- 3 - Claims 5, 23, 25 to 27, 32 to 34
a holding device holding at least one printing forme,
- 4 - Claims 5, 24, 25 to 27, 32 to 34
a register pin aligning at least one printing forme,
- 5 - Claims 5, 30, 31, 35 to 40
a drive/control device of the elements of the printing press.

The objects to be attained here consist in:

- 1 - to improve the shape of the image regulator,
- 2 - to increase the printing capacity (width/circumference of the cylinders, printing group characteristics ...) of the printing press,
- 3 - to hold the printing forme better,
- to align the printing forme exactly,
- 5 - to improve the control/drive mechanism (phase relation, control unit, control console ...).

The objects of the five inventions/groups differ from each other, a lack of unity therefore exists.

Since the special technical characteristics are neither identical not connected (Rules 13.1 and 13.2 PCT), the different inventions are not connected. Moreover, the present application lacks unity.

Re.: Item V

Reference is made to the following documents:

D1: USP 5,806,430
D2: USP 4,404,906
D3: DE 195 16 368
D4: DE 197 47 728 A1
D5: USP 5,076,163
D6: US 2003/047092
D7: EP-A-1 182 035
D8: DE 43 27 646 A1
D9: USP 6,550,384
D10: USP 5,553,542
D11: EP-A-1 048 460
D12: USP 5,500,801
D13: WO 03/064751
D14: USP 5,813,333
D15: USP 5,056,431

2 INDEPENDENT CLAIMS 1, 3, 5

2.1 The instant invention does not meet the requirements of Article 33(1) PCT because the subject of claims 1, 3, 5 is not based on inventive activities within the meaning of Article 33(3) PCT (see Item IV).

2.2 In addition, one skilled in the art would combine without inventive actions all characteristics disclosed in D1 and D3 for attaining the stated object. The attainment proposed in independent claim 1 therefore cannot be considered to be inventive (Article 33 (3) PCT).

2.3 Also, one skilled in the art would combine, without inventive actions, all characteristics disclosed in D5 and D3 for attaining the stated object. The attainment proposed in independent claim 1 can therefore not be considered to be inventive (Article 33(3) PCT).

2.4 Also, one skilled in the art would combine, without inventive actions, all characteristics disclosed in D5 and D3 for attaining the stated object. The attainment proposed in independent claim 1 therefore cannot be considered to be inventive (Article 33(3) PCT).

3 DEPENDENT CLAIMS 2, 4, 6 to 10, 30 to 42

3.1 Dependent claims 2, 4, 6 to 10, 30 to 42 do not appear to contain any additional characteristics which, in combination with any claim from which said claims depend, could lead to a

subject based on inventive activities. All these characteristics are known per se or are part of the prior art and have already been used for the same purpose (see the appropriate citations in the international search report). Moreover, these characteristics are merely related to structural embodiments which solve independent problems, without any surprising effects resulting from their combination.

Additional reasons for this are the following:

- Claim 2 - the characteristic "reference marker" is already known for measuring the values registration error/registration accuracy/elongation of the material to be imprinted (see D4),

- Claim 4 - the characteristic "image regulator: is already known and does not add any surprising effects (see D2, D5),

- Claims 6, 7 - it is already known from the prior art (for example D5 - DE 43 27 646 or D6 - USP 6,550,384 [sic - in list at the beginning of this section, these are D8 and D9, respectively]) that an image regulator deforms a material to be imprinted in a wave shape in the course of the ongoing printing process,

- Claims 8, 9 - the characteristic "factor of the transverse elongation" is known from D4,

- Claim 10 - the characteristic "web of material" is generally known (see D1 to D4),

- Claim 30 - the characteristic "drive mechanism" is known and solves an independent problem, namely to drive the cylinders with greater precision (see D13, D14),

- Claims 31 to 34 - it is known to one skilled in the art that a cylinder and/or an actuator are controllable as a function of the transverse/longitudinal elongation in order to improve registration accuracy, or to decrease the fan-out effect (see D6 or D7 or D14),

- Claims 35 to 40 - it is also known to one skilled in the art that a reference marker or a position of a center point can be checked by means of a detection device in order to determine registration errors,

- Claims 41, 42 - the characteristic "image regulator with air nozzle" is known from D7.

4 CLARITY

4.1 The claims (in particular claim 5) are not clear in accordance with Article 6 PCT, because some of the characteristics of the product claims are formulated as method claims (for example :**at the time** of applying an image", "**in the course of** the ongoing printing process" ...).

4.2 The term "and/or", used several times in the claims, keeps the reader in doubt regarding the claimed subject. This has the result that the definition of the subject of these claims is not clear (Article 6 PCT).